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REMARKS

This Amendment is in response to the Office Action mailed on June 13, 2006. Claims 1-12 remain pending.

102(b) Rejections:

Claims 1, 2, 5, 7, 8 and 11 were rejected as being anticipated, under 35 USC 102(b), by Kaneko (US 5,471,449). This rejection is traversed.

Claims 1 and 7 are directed to a deficiency detecting apparatus, which detects deficiencies on an information medium that are unable to be recorded or reproduced when an information signal is recorded / reproduced with respect to the information medium using a light beam generated by a laser light source. The apparatus of claim 1 requires, among other features, a deficiency detecting section for comparing a threshold value determined in accordance with the emitting power of the laser light source and adjusted by the power adjusting section with a value corresponding to light reflected by an information layer of the information medium. The deficiency detecting section detects the deficiencies on the information layer in accordance with a result of the comparison.

The apparatus of claim 7 requires, among other features, a deficiency detecting section for comparing a value corresponding to the signal for an amplified reflected light amount with a predetermined threshold value and detecting the deficiencies on the information layer in accordance with a result of the comparison. The signal for an amplified reflected light amount is amplified by a factor determined in accordance with the emitting power of the laser light source and adjusted by a power adjusting section.

Kaneko discloses a deficiency detecting section that uses as threshold values the demodulated signal reference values +REP and -REP, determined by the state of the FM modulation of the reproducing signal, to compare with the outputted FM demodulated reflection signal. The +REP and -REP reference values are therefore not determined in accordance with the reflected light amount or the laser emitting power. Thus, Kaneko fails to disclose a deficiency detecting section using a threshold value determined in accordance with the emitting power of the laser light source adjusted by the power adjusting section of claim 1.

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Claim 7 does not explicitly state that the predetermined threshold value is determined in accordance with the reflected light amount or the laser emitting power. However, because the signal for an amplified reflected light amount is amplified by a factor determined in accordance with the emitting power of the laser light source and adjusted by a power adjusting section, the predetermined threshold value must also be determined in accordance with the reflected light amount or the laser emitting power.

The deficiency detecting apparatus of claims 1 and 7 also require the feature of a power adjusting section for adjusting an emitting power of the laser light source to an optimum value. In contrast, Kaneko discloses an APC that maintains the emitting power of the laser light source at a set value for optimal recording. Accordingly, claims 1 and 7 are not anticipated. Claims 2-6 depend from claim 1 and should be allowable for at least these reasons. Claims 8-12 depend from claim 7 and should also be allowable for at least these reasons.

103(a) Rejections:

Claims 3, 4, 6, 9, 10 and 12 were rejected under 35 USC 103(a) as being obvious on consideration of Kaneko in view of Kawashima (US Publication No. 2003/0133378). This rejection is traversed.

Regarding claims 3 and 9, the Examiner correctly states that Kaneko does not disclose a deficiency detecting apparatus, wherein the deficiency detecting section determines the threshold value in accordance with an average value of the emitting power adjusted by the power adjusting section as provided in the present invention. The Examiner attempts to overcome this by referring to Kawashima. However, the combination of these references does not teach or suggest every element of claims 3 and 9.

In particular, the apparatus of Kawashima detects the difference in the return light between the first half and the latter half of the mark, and does not detect the difference of the emitting power like the apparatus of the present invention. The mean value of the return light, as shown in Kawashima, does not necessarily correspond to the emitting power as shown in Figure 4A where the mean value of the return light of the first half of

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the mark is much different from the mean value of the return light of the latter half of the mark, where a foreign matter is attached.

Regarding claims 4, 6, 10 and 12, the combination of Kawashima with Kaneko does not teach or suggest the feature of a deficiency detecting section using plural power levels of the emitting power in determining the threshold value. As described above, Kawashima detects the difference in the return light between the first half and the latter half of the mark and not the difference of the emitting power. Thus, the calculations used for the sampling data shown in Figure 5 of Kawashima cannot be the same as the calculations for determining the threshold value using the plural power levels of the emitting power. Accordingly, claims 3, 4, 6, 9, 10 and 12 are further removed from the references and should be allowed.

Conclusion:

In view of the above amendments and remarks, Applicants respectfully request a Notice of Allowance for claims 1-6 and 12-18. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

52835 PATENT TRADEMARK OFFICE

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